

**POST INSPECTION MEMORANDUM**

**Director Approval:** Chris Hoidal \_\_\_\_\_  
**Peer Review:** Tom Finch \_\_\_\_\_  
**Sr. Eng Review:** Dave Lykken \_\_\_\_\_  
**Inspector:** Kuang Chu & Lex Vinsel  
**WUTC Docket Number:** PG-070048  
**Follow-Up Enforcement:** No

**Date:** November 16, 2007

**Operator Inspected:** Williams Gas Pipeline -West   **OPID:** 13845   **Region:** Western

**Unit Address:** 42612 East Christy Road                      **Unit Inspected:** Plymouth - LNG  
P.O. Box 330  
Plymouth, WA 99346

**Unit ID:** 1155

**Unit Type:** Natural Gas Peak Shaving & LNG Storage

**Inspection Type:** I01  
I01 - Abbreviated Procedures Standard Inspection, I08 - OQ Field Verification, and I07 - IMP Field Verification & Follow up

**Record Location:** Plymouth, WA                      **Inspection Dates:** Nov. 5-7, 2007  
**AFOD:** 3

**Operator Contact:** Austin Sorensen

**Phone:** (801) 584-6117   **Fax:** (801) 584-6735   **Emergency:** (800) 972-7733

**Unit Description:** The Plymouth LNG facility is located southwest of Pasco, Washington and west of Interstate Highway 82. The facility consists of two storage tanks commissioned in 1975 and 1979 with a capacity of approximately 14,616,000 gallons each. Two liquefaction processors consist of an integrated cascade loop system with a capacity of 6 MMCFD each. Four vaporizers have a capacity of 75 MMCFD each. The boil-off gas vapors are collected from the storage tanks and injected into the transmission pipelines.

**Facilities Inspected:** The following areas were inspected: the LNG tank foundation ring walls, tank shell, tank foundation drainage, supports for aboveground LNG piping, auxiliary power supply, aboveground fuel and refrigerant storage containers, the gas metering area, personnel fire protection clothing, signs and fire fighting equipment.

The plant's fire and gas detection systems were tested during the field inspection and they were all calibrated and worked properly.

The LNG plant's cathodic protection system rectifiers were inspected. The pipe-to-soil potentials at selected locations were taken. All the potentials met the code requirements.

**Probable Violations/Concerns:**

There were no probable violations found during this inspection. However, there were two areas of concern as follows:

1. The operator has established a record keeping system for all the repairs made in the LNG plant. It requires a manual input to a form for the information concerning each repair. The form contains two parts. The upper part is for the information of the repair and the lower part is for recording the action taken to close this item. During the records review, it was found that some of the records were incomplete. The lower part of some of the forms was not completed even though the repairs have already been made. The operator should make sure that each repair item has been completed and the form is properly recorded.
2. The DC voltage output for cathodic protection rectifier number 1302 has not been read correctly for at least two years. This rectifier was damaged by lightning and was rebuilt later. The configuration of this rectifier is different from the other rectifiers and it was the cause of confusion. The technician taking the rectifier readings must be aware of the unique configuration of this rectifier, or the operator may consider replacing this rectifier with a late model design to avoid making the same mistake.

**Recommendations:**

The native potentials for cathodic protection in the LNG Plant were established in 1994. The validity of the native potentials is questionable as the plant and its equipment have been modified since then. It is desirable to re-establish the native potentials before the next annual cathodic protection survey.

**Comments:** None

**Attachments:** None

Version Date: 9/05/07